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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/637,500	08/11/2000	Robert Gelinas	1778.2090001	7608

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EXAMINER

TSAI, HENRY

ART UNIT PAPER NUMBER

2181

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/637,500	<b>Applicant(s)</b> GELINAS ET AL.	
	<b>Examiner</b> Henry W.H. Tsai	<b>Art Unit</b> 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

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**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. Claims 27-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 27, lines 4-5, it is not clear what is meant by "a fixed number of times on a number stored in the register set" since how "a number stored in the register set" is related to the other elements is unclear. Further, in line 8, it is not clear whether "a loop count value" is the same as "a number stored in the register set". Similar problems exist in the other claim 29.

Applicant is required to review the claims and correct all language which does not comply with 35 U.S.C. § 112, second paragraph.

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***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 25-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Gallup et al. (U.S. Patent No. 5,717,947), hereafter referred to as Gallup et al.'947.

Referring to claim 25, Gallup et al.'947 discloses, as claimed, a circular buffer control circuit (such as the control unit inside the Gallup et al.'947's system), comprising a first number of circular buffer start registers (repeat begin registers, RBR, 180 see Fig. 2-55); a first number of circular buffer end registers (repeat end registers, RER, 182 see Fig. 2-56), each associated with a different one of the circular buffer start registers (repeat begin registers, RBR, 180 see Fig. 2-55); and circular buffer control logic (such as the control unit logic inside the Gallup et al.'947's system) including means for comparing (see Col. 45, lines 65-66, regarding the address of the instruction currently executed being compared against the

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RER register value) a pointer (such as a PC 186 see Fig. 2-47,  
containing the address of the instruction currently executed) to  
an address in a selected one of the circular buffer end  
registers, and means for restoring (since the RBR is used by the  
repeat and to allow rapid execution of the inner loop of  
program, see Col. 45, lines 46-48, therefore, restoring the  
address of the start register certainly is the step to repeat an  
original executed loop) the address in the one of the circular  
buffer start registers (repeat begin registers, RBR, 180 see  
Fig. 2-55) associated with the selected circular buffer end  
register (repeat end registers, RER, 182 see Fig. 2-56) if the  
pointer (such as a PC 186 see Fig. 2-47, containing the address  
of the instruction currently executed) matches (see Col. 45, 66-  
67) the address in the selected circular buffer end register.  
Note claim 26 recites the corresponding limitations which are  
taught by Gallup et al.'947 as set forth in the claim 25.

Referring to claim 27, Gallup et al.'947 discloses, as claimed, a digital signal processor capable of executing looping instruction commands (see Col. 45, lines 46-48, regarding the  
RBR is used by the repeat and to allow rapid execution of the  
inner loop of program), comprising: a register set (the register  
set comprising such as Instruction Register, IR, 352, see Fig.  
2-45; and G registers, see Col. 46, lines 13-14); and means for

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executing a loop instruction command a fixed number of times (Repeat Count Register, RCR, 184, see Col. 46, lines 8-11) on a number stored in the register set, including first means for executing a current instruction stored in a first portion (the first portion of IRH in \$0050 see Fig. 2-45) of a first register (Instruction Register, IR, 352, see Fig. 2-45 and Col. 43, lines 39-44) within the register set, second means for decrementing (see Col. 46, lines 14-17) a loop count value (the value of Repeat Count Register, RCR, 184, see Col. 46, lines 8-11) stored in a second register (G register, see Col. 46, lines 13-14) within the register set, and third means for executing another portion of the current instruction stored in a second portion (the second portion of IRH in \$0050 see Fig. 2-45) of the first register and a third register (the register containing IRL in \$0051 see Fig. 2-45) within the register set. Note claim 29 recites the corresponding limitations which are taught by Gallup et al.'947 as set forth in the claim 27.

As to claims 28 and 30, Gallup et al.'947 also discloses: the digital signal processor of claim 27, further including means for exiting the loop instruction command when the loop count value reaches zero (see Col. 46, lines 17-18, regarding RCR equaling zero).

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**Response to Amendment**

4. Applicant's arguments mailed 9/29/05 have been considered but are moot in view of the new ground(s) of rejection. As set forth in the art rejections above, Gallup et al.'947 teaches the claimed invention.

**Contact Information**

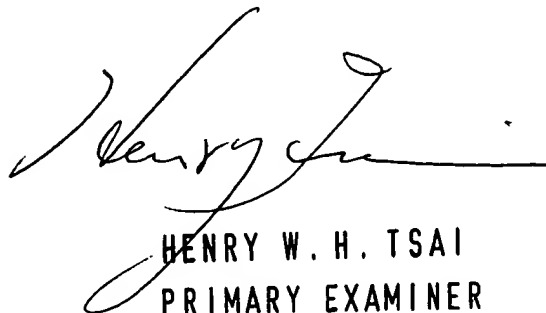
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Henry Tsai whose telephone number is (571) 272-4176. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner supervisor, Dov Popovici, can be reached on (571) 272-4083. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC central telephone number, 571-272-2100.

6. In order to reduce pendency and avoid potential delays, Group 2100 is encouraging FAXing of responses to Office actions directly into the Group at fax number: 571-273-8300. This practice may be used for filing papers not requiring a fee. It

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may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account.

Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 2100 will be promptly forward to the examiner.



HENRY W. H. TSAI  
PRIMARY EXAMINER

December 6, 2005